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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,728	01/16/2004	Harold L. Wagner	0403UR	6375

7590 03/01/2005

Paul S. Rooy
2620 S. Peninsula Dr
Daytona Beach, FL 32118

EXAMINER

ALI, MOHAMMAD M

ART UNIT PAPER NUMBER

3744

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,728

Applicant(s)

WAGNER ET AL.

Examiner

Mohammad Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Drawings

The drawings were received on 01/21/05. These drawings are approved.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2 –5, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (6,513,341) in view of Tajiri et al., (5,341,652). Nakajima discloses a vehicle air conditioning system comprising a direct current split air conditioner 100 including compressor 1, a condenser/external heat exchanger 2, an evaporator/first internal heat exchanger 3, the evaporator being placed in an insulated/inherent duct 3 is considered located remote from compressor 1 and the condenser 2. See Fig. 1-2 and

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column 4, lines 4-8. Nakajima discloses the invention substantially as claimed as stated above. However, Nakajima does not disclose the location of the compressor, condenser and evaporator. Tajiri et al., teach the use of distinct location of a compressor 12 located in a compartment 7, a condenser/exterior heat exchanger 10 located in a separate compartment 6 and an evaporator/interior heat exchanger 8 located in different compartment 5 indicating that the compressor, condenser and evaporator are mounted at a substantial distance relative to the size of the vehicle¹ for the purpose of better heat transfer feature. Tajiri et al., also disclose the location of the compressor is at the body bottom of the vehicle. See Fig. 1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle air conditioning system of Nakajima in view of Tajiri et al., such that location of compressor, condenser and evaporator could be provided in substantial distance relation to the size of the vehicle in order to mount the components at a substantial distance with each other for better heat transfer purpose.

Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Tajiri et al., as applied to claim 3 above and further in view of Aoki (20040112076A1). Nakajima in view of Tajiri et al., discloses the invention substantially as claimed as stated above. However, Nakajima in view of Tajiri et al., does not disclose the location of the compressor and condenser on the vehicle rear. Aoki teaches the use of a compressor and condenser mounted on the body rear in a vehicle air conditioning system for the purpose of having a desired location of the compressor and condenser. Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the vehicle air conditioning system of Nakajima in view of Tajiri et al., and further in view of Aoki such that the compressor and a condenser could be mounted on the body rear in order to have a vehicle rear mounted compressor and condenser. Regarding shelf for claims 7 and 9, the examiner considers the numeral 2 of Aoki include a shelf. Alternatively, any mounting plate or body can be considered as a shelf since there is no criticality or unexpected result from it.

Claims 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Tajiri et al., as applied to claim 3 above and further in view of Drucker et al., (5,632,330)). Nakajima in view of Tajiri et al., discloses the invention substantially as claimed as stated above. However, Nakajima in view of Tajiri et al., does not disclose the location of the condenser and evaporator on the vehicle roof. Drucker et al., teach the use of a condenser 56 and evaporator 40 mounted on the body roof in a vehicle air conditioning system for the purpose of having a roof top location of the condenser and evaporator in order to save the space in the engine room. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle air conditioning system of Nakajima in view of Tajiri et al., and further in view of Drucker et al., such that a condenser and an evaporator could be mounted on the body roof in order to have a roof top location of the condenser and the evaporator in order to avoid congestion in the engine room of the

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vehicl. Regarding shelf for claims 12, the examiner considers the roof surface on which the evaporator 40 of Drucker et al., is mounted as a shelf.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Tajiri et al., as applied to claim 3 above and further in view of Sugiura (20040031602A1)). Nakajima in view of Tajiri et al., discloses the invention substantially as claimed as stated above. However, Nakajima in view of Tajiri et al., does not disclose the location of the evaporator on the vehicle body bottom. Sugiura teaches the use of an evaporator 314 mounted on the body bottom in a vehicle air conditioning system for the purpose of having a convenient location of the evaporator. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle air conditioning system of Nakajima in view of Tajiri et al., and further in view of Sugiura such that an evaporator could be mounted on the body bottom in order to have a convenient location of the evaporator for better heat transfer purpose.

Response to Arguments

Applicant's arguments, see remarks and conclusion page 5 to 8, filed 01/02/05, with respect to the rejection(s) of claim(s) 1-14 under 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of combination of new prior art as explained above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

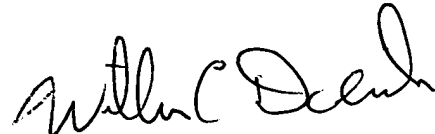
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is 703-308-5032. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Esquivel Denise can be reached on 703-308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mohammad M. Ali
February 25, 2005


WILLIAM DOERRLER
PRIMARY EXAMINER